

STENINA, T.A.

Microbiological characteristics of some soils of the Komi A.S.S.R.
Izv. Komi fil. Geog. ob-va SSSR no.9:38-48 '64.
(MIRA 18:5)

STENINA, T.A.

Decomposition of plant residues in arable Podzolic soils.
Pochvovedenie no.1:95-102 Ja '64. (MIRA 17:3)

1. Komi filial Akademii nauk SSSR.

L 18994-63

EWP(q)/EWT(m)/BDS

AFFTC/ASD/ESD-3

Pq-4

WH/JD/JG

ACCESSION NR: AT3002454

S/2935/62/000/000/0207/0211

72
69AUTHOR: Gaman, V. I.; Sirokin, A. A.; Stenina, V. M.

TITLE: Effect of As-S-I low-melt glass on current-voltage characteristics of silicon p-n junctions [Conference on Surface Properties of Semiconductors, Institute of Electrochemistry, AN SSSR, Moscow, 5-6 June, 1961]

SOURCE: Poverkhnostnye svoystva poluprovodnikov. Moscow, Izd-vo AN SSSR, 1962, 207-211

TOPIC TAGS: low-melt glass, current-voltage characteristic, semiconductor, silicon, silicon junction

ABSTRACT: Experimental studies are described of alloyed Si junctions hot-coated with 24% As, 67% Si, 9% I glass. The dielectric constant of the glass was 6.5, its $\tan \delta$ was $(4.5-0.4) \times 10^{-3}$ at 30-10,000 cps. Al was alloyed into n-Si with a resistivity of 10-15 ohms.cm. The junctions were dipped into the glass melt at 250-300C for 1 min, then aged for 30-50 hrs at 130-150C, then subjected

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3

to tropical humidity for 75 hrs, and finally went through 3 thermal 70-min cycles -60+130C. Reverse current-voltage characteristics were determined at various stages of the above treatment. It was found that the glass acted as a getter absorbing contaminants from the surface of the junctions; that the glass was moisture-resistant and that its dielectric loss was low. "In conclusion, the authors wish to thank B. V. Makarkin for measuring the dielectric characteristics of the glass." Orig. art. has: 4 figures and 1 formula.

ASSOCIATION: Tomskiy gosudarstvenny*y universitet im. V. V. Kuyby*sheva
(Tomsk State University)

SUBMITTED: 00

DATE ACQ: 15May63

ENCL: 00

SUB CODE: PH

NO REF SOV: 002

OTHER: 005

Card 2/2

FRIDMAN, E.A.; STENINA, Ye.S.

Analysis of an outbreak of influenza caused by a mixed culture of
virus types A₁ and C. Trudy Len.inst.epid.i mikrobiol. 17:30-35
'58. (MIRA 16:2)

1. Iz laboratorii Leningradskogo instituta epidemiologii, mikrobiolo-
gii i gigiyeny imeni Pastera, zav. E.A. Fridman.
(INFLUENZA—MICROBIOLOGY)

ANSHELES, I.M.; FRIDMAN, E.A.; STENINA, Ye.S.; KLUSHINA, T.A.; TARASOVA, Ye.F.; KHAZANSON, L.B.

Epidemiological and virological characteristics of the influenza pandemic of 1957 in Leningrad. Trudy Len.inst.epid.i mikrobiol. 17:66-77 '58. (MIRA 16:2)

1. Iz sektora epidemiologii (zav. I.M. Ansheles) i laboratorii grippa (zav. E.A. Fridman) Leningradskogo instituta epidemiologii, mikrobiologii i gigiyeny imeni Pastera, Gorodskoy sanitarno-epidemiologicheskoy stantsii i Protivogrippoznogo kabineta 39-y polikliniki Dzerzhinskogo rayona, Leningrada.
(LENINGRAD—INFLUENZA)

ANSHELES, I.M.; FRIDMAN, E.A.; KLUZHINA, T.A.; STENINA, Ye.S.; KHAZENSON, L.B.;
TARASOVA, Ye.F.

Influenza pandemic of 1957 and certain epidemiological and virological
characteristics of influenza in Leningrad. Vop. virus 4 no.1: Ja-P '59
(MIRA 12:4)

1. Leningradskiy institut epidemiologii, mikrobiologii i gigiyeny imeni
Pastera, Leningradskaya gorodskaya sanitarno-epidemiologicheskaya stant-
siya i 39-ya poliklinika.

(INFLUENZA, epidemiol.
in Russia (Rus))

FRIDMAN, E.A.; GRIGOR'YEVA-BERENSSTEYN, A.G.; STENINA, Ye.S.; KUDYAKOVA, L.I.; FILIPPOVA, G.D.; BOLDASOV, V.K.

Immunological evaluation of the effectiveness of anti-influenza vaccination in 1958-1959 '61. Trudy Len.inst.epid.i mikrobiol. (MIRA 16:2) 22:146-156 '61

1. Iz laboratorii grippa (zav. E.A. Fridman) Leningradskogo instituta epidemiologii i mikrobiologii imeni Pastera i otdela epidemiologii (zav. A.G. Grigor'yeva-Berenshteyn) Leningradskogo nauchno-issledovatel'skogo instituta vaktsin i syvorotok. (INFLUENZA--PREVENTIVE INOCULATION) (IMMUNITY)

18.7100
Translation from: Referativnyy zhurnal, Metallurgiya, 1959, Nr 5, p 275
(USSR)

81544
SOV/137-59-5-11408

AUTHORS: Stenkin, P.A., Lipchin, N.N.
TITLE: Application of High Heating Temperatures in Isothermal Quench-Hardening of Carbon Tool Steel
PERIODICAL: Prom.-ekon. byul. Sovnarkhoz Permsk. ekon. adm. r-na, 1958,
Nr 9, pp 7 - 11

ABSTRACT: To increase stability of supercooled austenite within the range of perlite and intermediate transformations, heating for quench-hardening was carried out to higher temperatures. To avoid grain growth at high temperatures the rate of heating must exceed the rate of grain growth. Specimens of U8 steel of 10 mm cross section were heated in a salt bath at 1,000°, 1,100° and 1,200°C, were held for different lengths of time and were then quenched in oil heated to 130°C. The best results in quench-hardening were obtained after speeded-up heating in a salt bath, holding at 1,200°C for 3 sec, for 6 sec at 1,100°C and for 10 sec at

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SOV/129-59-5-16/17

AUTHORS: Lipchin N.N. (Cand.Tech.Sciences) and Sten'kin P.A.
(Engineer)

TITLE: Isothermal Quenching of Carbon Steels from High Heating Temperatures (Izotermicheskaya zakalka uglerodistykh stalei s vysokikh temperatur nagreva)

PERIODICAL: Metallovedeniye i Termicheskaya Obrabotka Metallov, 1959, Nr 5, pp 59-60 (USSR)

ABSTRACT: Isothermal quenching of complicated carbon steel tools from currently used heating temperatures reduces deformation considerably but it cannot be used in practice since it does not ensure the required high hardness. Therefore, for manufacturing tools of complex shape, alloy steels are used instead of carbon steels. The tools are subjected to ordinary hardening and then they are trued. For increasing the stability of super-cooled austenite of carbon steels in the range of perlitic and intermediate transformations the authors heated the specimens for hardening to more elevated temperatures so that they could apply heated media for cooling. The curve, Fig 1, shows the influence of the heating temperature of 5 mm diameter U7 steel specimens on the hardness in the case of

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SOV/129-59-5-16/17

Isothermal Quenching of Carbon Steels from High Heating Temperatures quenching in oil heated to 130°C. However, the properties of steel are influenced not only by the temperature but also by the speed of heating and the duration of maintaining the specimen at the given temperature. To avoid grain growth at elevated temperatures it is necessary to apply a heating speed which is slightly higher than the speed of grain growth. This condition can be fulfilled for some tools in the case of heating in ordinary salt baths. The dependence of the change in hardness of the core of a 10 mm diameter U8-steel specimen on the duration of heating at 1000, 1100 and 1200 °C with subsequent quenching in oil heated to 130°C is graphed in Fig 2. A hardness of 60 R_c can be obtained by heating with a speed of 400°C/sec to 1200°C, 200°C/sec to 1100°C and 100°C/sec to 1000°C and holding the components at these temperatures for 0.5, 1 and 1.5 min respectively. The authors established that the heating duration of components for each 1 mm of the cross-section in the case of heating in a salt bath should be 3 sec for 1200°C, 6 sec for 1100°C and 10 sec for 1000°C.

Card 2/4 Investigations have shown that if such a regime is applied, the hardened specimens and tools will conserve

SOV/129-59-5-16/17

Isothermal Quenching of Carbon Steels from High Heating Temperatures
a fine grain structure. An appreciable growth of the
grain was observed only in the case of 3- to 4-fold
increases of the heating durations compared to those
graphed in Fig 2. The deformation during hardening was
measured on French type ring specimens. Thus, in the case
of quenching such specimens in water after heating for
0.5 min at 1200°C, the deformation between the reference
points was 0.37 mm whilst in the case of quenching in oil
heated to 130°C, the corresponding deformation was 0.4 mm,
i.e. 9 times lower. The hardness was 60 to 62 R_c. In
the Perm' Machinery Works introduction of the method of
isothermal hardening in heated oil after accelerated
heating to elevated temperatures has eliminated completely
rejects due to cracks in the manufacture of blades of
meat cutting machines. Originally the number of rejects
reached up to 30%. The here-described method is likely
to be extensively used for hardening of small carbon

Card 3/4

SOV/129-59-5-16/17

Isothermal Quenching of Carbon Steels from High Heating Temperatures

steel components and tools of complex shape which are
prone to crack formation and warping.

There are 2 figures.

Note: This is a complete translation.

ASSOCIATION: Permskiy gosudarstvennyy universitet i Permskiy
zavod torgovogo mashinostroyeniya (Perm' State
University and Perm' Works for Consumer Goods Machinery)

Card 4/4

S/147/63/000/001/012/020
E031/E181

AUTHOR: Sten'kin, Ye. D.

TITLE: The optimum ratio of the total pressures in the mixing chamber of a by-pass jet engine

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Aviatsionnaya tekhnika, no.1, 1963, 104-115

TEXT: Initially it is assumed that $k_I = k_{II}$, where k is the adiabatic exponent and the subscripts indicate the inner (I) and the surrounding (II) gas flows at the input to the mixing chamber, respectively. The maximum positive effect of mixing is determined by the difference achieved thereby in the total temperatures of the initial flows. The maximum is achieved at an optimum ratio of the total pressures p . In this paper, this ratio is determined for a cylindrical mixing chamber. The effect of mixing is found from the ratio of the output momentum flow of the mixture to the sum of the momentum flows of the separate streams. From this, and assuming p_{II}^* and λ_{II} (the asterisk denotes isentropic ram compression and λ is the reduced velocity)

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The optimum ratio of the total ...

S/147/63/000/001/012/020
E031/E181

are constant, a system of equations for p_I^* is established.

It was recommended by A.L. Klyachkin (NDVSh, Energetika, no.2, 1959) that, for optimum mixing, the total pressures should be equal. This is confirmed to within the approximations of this paper. Graphs of the pressure ratio for various λ_{II} are given.

The conclusions of A.L. Klyachkin are generalized by taking account of the effect of different temperature ratios and, finally, for $k_I \neq k_{II}$.

There are 6 figures.

SUBMITTED: June 11, 1962

Card 2/2

ACCESSION NR: AP4040975

S/0147/64/000/002/0088/0101

AUTHOR: Sten'kin, Ye. D.

TITLE: Optimum compression in the compressor of a bypass turbojet engine with afterburning

SOURCE: IVUZ. Aviatsionnaya tekhnika, no. 2, 1964, 88-101

TOPIC TAGS: turbojet engine, bypass turbojet engine, thrust augmentation, turbojet

ABSTRACT: The performance characteristics of a bypass-turbojet engine with afterburning to a great extent depend on the degree of pressure increase (π_{k1}) in the main gas generator. Formulas were derived in terms of engine cycle parameters for determining the optimum values of π_{k1} for a bypass turbojet engine with and without mixing of the flows. Use of the formulas reduces the cumbersome thermodynamic calculations currently used in selecting optimum engine parameters and is particularly recommended in cases where electronic computers are employed. Orig. art. has: 48 formulas and 5 figures.

ASSOCIATION: none

Card 1/2

ACCESSION NR: AP4040975

SUBMITTED: 06Jan64

ATD PRESS: 3049

ENCL: 00

SUB CODE: PR

NO REF SOV: 003

OTHER: 002

Card 2/2

STEN'KIN, Ye.D.

Optimum compression in the compressor of a by-pass turbojet engine
with a booster. Izv.vys.ucheb.zav.;av.tekh.7 no.2:88-l.1 '64.
(MIRA 17:9)

STEN'KIN, Ye.D.

Consumption and pressure characteristics of the mixing chamber
of a bypass turbojet engine. Izv. vys. ucheb. zav.; av. tekhn. 8
no.2:115-120 '65. (MIRA 18:5)

AUTHOR: Sten'kin, Ye. D.

B

TITLE: Input-output head characteristic of the mixing chamber, gas dynamic analysis, jet engine theory, gas dynamics, input output characteristic

SOURCE: IVUZ. Aviatsionnaya tekhnika, no. 2, 1965, 115-120

TOPIC TAGS: dual turbojet engine, mixing chamber, gas dynamic analysis, jet engine theory, gas dynamics, input output characteristic

ABSTRACT: In double turbojet engines (abbreviated DTJE) which are designed for subsonic flight speeds, a mixing chamber is normally provided. Depending on the operating mode of the engine, this chamber, just as the other units, will have a varying effect on engine efficiency. The analysis of this effect at non-rated modes (non-rated operating conditions) is shown in the article to be closely related to the characteristic of the unit (in this case, the mixing chamber), with the characteristic making possible the representation, usually in graphic form, of the fundamental thermo- and gas-dynamic peculiarities of the unit itself. Such a mixing chamber characteristic is derived in this article. The analysis deals only with the complete mixture leaving the chamber, while the problem of partial mixture is

L 50505-65

ACCESSION NR: AP5012093

not discussed in the present paper. The determination of the complete mixture temperature is considered. In the author's treatment, the mixing chamber is regarded as a particular case of an ejector with the characteristic developed on the basis of methods for the calculation of mixture parameters. The method proposed in the article, while specifically elaborated for a cylindrical mixing chamber (the type normally found in DTJE), can also be used with chambers having a variable cross section. The choice of coordinates for the representation of the characteristic is determined in this method by their suitability for a thermodynamic analysis of the DTJE. An example of such a characteristic is given in graphic form. It is analyzed for its basic peculiarities under different engine operating conditions. Orig. art. has: 10 formulas and 3 figures.

ASSOCIATION: None

SUBMITTED: 15Apr63

ENCL: 00

SUB CODE: PR

NO DPF SNOV. 005

OTHER: 000

L 29330-66 EWP(m)/EWP(k)/EWT(d)/EWT(1)/EWT(m)/T/EWP(w)/EWP(v) IJP(c) EN/KA/ME
ACC NR: AP6017831 SOURCE CODE: UR/0147/66/000/002/0083/0089

AUTHOR: Sten'kin, Ye. D.

40
B

ORG: none

TITLE: Simultaneous flow of two gas streams through a reaction nozzle

SOURCE: IVUZ. Aviatsionnaya tekhnika, no. 2, 1966, 83-89

TOPIC TAGS: turbojet, bypass turbojet, afterburner, jet mixing

ABSTRACT: The mixing chambers in bypass turbojet engines are comparatively short (1 to 2 chamber diameters). Therefore, mixing is not complete since a chamber length of 4 to 5 chamber diameters is required for complete mixing. This problem was analyzed under the assumption that the flow takes place without loss in total pressure and that at below critical flow velocities the pressure at the exit section equals the external pressure. The analysis based on Lyapunov's theorem for the flow stability yielded a formula which correlates the flow parameters of both streams. This formula showed that in the exit section, one stream is always subsonic while the other is supersonic. The formula can be used for designing mixing chambers of bypass turbojet engines or for afterburner mixing chambers. Orig. art. has: 16 formulas and 3 figures. [PV]

SUB CODE: 21/ SUBM DATE: 18Jan65/ ORIG REF: 006/ OTH REF: 003/ ATD PRESS 50/0

Card 1/1 1/1

UDC: 629.194.33

LEBEDEV, P.T.; USOVICH, A.T.; CHEPUROV, K.P., prof.; KAL'CHENKO, M.M., aspirant; MATUSEVICH, V.F., doktor veterin. nauk; STEN'KO, A.S., mladshiy nauchnyy sotrudnik; LAKHMYTKINA, A.N., aspirant; GRISHCHENKO, N.F.; ORLOV, A.I., veterinarnyy vrach (Arkhangel'skaya obl.); PROSTYAKOV, A.P., kand. biolog. nauk; KOVYNDIKOV, M.S., kand. veterin. nauk; ARIFDZHANOV, K.A., kand. veterin. nauk

Veterinary experiments. Veterinariia 41 no.4:101-111 Ap '64.

(MIRA 17:8)

1. Sibirskiy nauchno-issledovatel'skiy veterinarnyy institut (for Lebedev, Usovich). 2. Poltavskiy sel'skokhozyaystvennyy institut (for Chepurov, Kal'chenko). 3. Ukrainskiy nauchno-issledovatel'skiy institut zemledeliya (for Matusevich, Sten'ko, Lakhmytkina). 4. Chernigovskaya oblastnaya veterinarnaya laboratoriya (for Grishchenko). 5. Ukrainskiy nauchno-issledovatel'skiy institut eksperimental'noy veterinarii (for Prostyakov, Fortushnyy, Kovyndikov). 6. Uzbekskiy nauchno-issledovatel'skiy veterinarnyy institut (for Arifdzhakov).

L 26145-66 EWT(m)/EWK(d)/EWP(t)/EWP(k) IWP(c) JI/HW

ACC NR: AT6014331

SOURCE CODE: UR/2529/62/000/070/0106/0123

AUTHOR: Stenko, B. P.

33

B+1

ORG: none

TITLE: Thermal phenomena during the process of shear forming

SOURCE: Kazan. Aviatsionnyy institut. Trudy, no. 70, 1962. Aviatsionnaya tekhnologiya i organizatsiya proizvodstva (Aviation engineering and organization of production), 106-123

TOPIC TAGS: metal forming, shear forming, hydroforming

ABSTRACT: Thin-wall shells in the shape of a body of revolution are frequently used in aircraft and aerospace vehicles. Manufacture of such shells by conventional methods is both difficult and expensive, especially when heat- and oxidation-resistant steels and alloys with poor machinability are involved. A new method of "shear forming" appears to be much simpler and more economical. In shear forming, specific pressures of 300 kg/mm² and higher are used and initial preforms can be up to 40 mm thick. Wide use of this method is delayed by a lack of theoretical and experimental studies which would provide a basis for establishing the optimal conditions of the process, designing equipment and tools, and expanding the number of materials and parts which can be processed. The department of aircraft construction at Kazan' Aviation Institute, under the leadership of Professor M. I. Lysov, is presently studying the

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L 26145-66

ACC NR: AT6014331

process of shear forming to obtain the data needed for designing technological processes. These studies include investigation of the stress and strain states of formed parts, depending on the material used and the forming conditions; investigations of force factors and thermal processes; and testing cooling and lubrication methods. This article is a report on a theoretical analysis of thermal phenomena taking place in the formed part and formed tool. A series of equations is derived and used to calculate the temperature fields in a formed part of cylindrical shape and in a forming roller. Orig. art. has: 9 figures and 39 formulas. [DV]

SUB CODE: 13/ SUBM DATE: 04Nov61/ ORIG REF: 002/ ATD PRESS: 4251

Card 2/2

L 00601-66 EWT(1)/EWT(m)/EWP(t)/EWP(k)/EWP(b)/EWA(c) JD/PW

ACCESSION NR: AR5018953

UR/0276/65/000/007/V027/V027
621.983.4

SOURCE: Ref. zh. Tekhnologiya mashinostroyeniya. Svodnyy tom, Abs. 7V202

AUTHOR: Stenko, B. P. 44,55

TITLE: Measuring the forces arising during power spinning and ironing 15 44,55

CITED SOURCE: Tr. Kazansk. aviats. in-ta, vyp. 84, 1964, 85-94 44,55

TOPIC TAGS: power spinning, ironing, roller contact surface, surface projection

TRANSLATION: The report considers a program for defining the contact surface projected area for spinning rollers with a conical radial section. It is noted that the shape and dimensions of the contact surface and its projection depend on such parameters as the roller indentation depth t , feed S , the roller angle-of-taper θ , and their correlations. Formulas are given for calculating projections at S larger, smaller, or equal to $t \cdot \text{ctg} \theta$. The author describes experimental procedure and equipment (machine tool, mandrel, spring dynamometer with resistance strips and instrumentation). Bibl. with 3 titles, 5 illustrations. S. Kolesnikov

Card 1/2

19
B

L 00601-66

ACCESSION NR: AR5018953

SUB CODE: IE

ENCL: 00

Card

2/2

L 16105-66 EWP(k)/EWT(1)/EWT(m)/EWA(d)/EWP(t) JD/HE

ACC NR: AT6003155

SOURCE CODE: UR/2529/64/000/084/0085/0094

33

AUTHOR: Stenko, B. P.

32

ORG: Kazan Aviation Institute (Kazanskiy aviatsionnyy institut)

B+1

TITLE: On the question of determining stresses in the process of forced precision
pressing of parts

SOURCE: Kazan. Aviatsionnyy institut. Trudy, no. 84, 1964. Aviatsionnaya
tekhnologiya i organizatsiya proizvodstva (Aviation technology and production
management), 85-94

TOPIC TAGS: metal pressing, metalworking, metalworking machine, metal stamping,
metal forming, steel/ U8A steel

ABSTRACT: Considerations in determining stresses occurring in the process of
forced rotational pressing of precision parts are developed. Emphasis is placed on
determining the effect on the process of such parameters as V - the rate of rotation,
S - the feed rate, f - the press coefficient, and others. The resultant stress P is
the product

$$P = q \cdot F,$$

where q is the mean unit tool pressure, and F is the contact area between the tool

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L 16105-66
ACC NR: AT6003155

and the part. This product may be written in a form suited to defining stress components as related to area projections on coordinate planes. A method of determining the projected areas of contact surface for press rollers with conical radial profiles is developed. Circumferential deformations are ignored as radial and longitudinal distortions are emphasized. Geometrical equalities for an example case are given. Special testing equipment was designed and constructed for studying the process. The equipment consisted of a dynamometer with a press roller, a press mandrel, and instrumentation. Each major component of the test equipment is described. The system was tested and checked out with the preparation of a roller of U8A steel. Some details of temperature-measuring instrumentation are given.
Orig. art. has: 27 equations and 5 figures.

SUB CODE: 13/ SUBM DATE: 010ct63/ ORIG REF: 003

Card 2/2 *47*

KHAYET, G.L., kand.tekhn.nauk; STEN'KO, D.A., inzh.; BRUSILOVSKIY, B.A., inzh.

Experience of the Novo-Kramatorsk Machinery Plant (Kramatorsk)
in hard-facing large parts by rolling with rolls. [Trudy]
TSNIITMASH 91:76-94 '59. (MIRA 12:8)
(Hard facing) (Kramatorsk--Machinery industry)

STEN'KO, D.A.

25(2,5) PHASE I BOOK EXPLOITATION Sov/2885

Tsentral'ny nauchno-issledovatel'st'yi Institut tekhnologii i mashinostroyeniya

Pereshchepin, prochnost' elementov konstruktivnykh i detail'nykh mashin
 [Increasing the Strength of Constructional and Machine Elements]
 Moscow, Mashgiz, 1959. 210 p. (Series: Iss. 2, born. 7 kn. 31)
 5,500 copies printed.

Ed. (Title page): I. V. Kudryavtsev, Doctor of Technical Sciences,
 Professor; Ed. (Inside book): A. G. Nikitin, Engineer-Tech.
 Ed.: V. D. Elkundi, Managing Ed. for Literature on Transport
 Machine Building (Mashgiz); K. A. Ponomarev, Engineer.

PURPOSE: This collection of articles is intended for designers,
 process engineers, and scientific research workers in the
 machine-building industry.

COVERAGE: The collection contains papers dealing with experimental
 work done recently by MASH. The experiments are concerned
 with the practical use of surface work-hardening in industry.
 Industrial practices intended to increase the strength and
 service life of machine parts and constructional elements are
 discussed. Several articles are devoted to problems of in-
 creasing the fatigue strength of machine parts by work hardening.
 Industrial practices of NKKZ in Krasnogorsk in external bur-
 nishing of large machine parts are presented. Tools and fixtures
 used in surface work hardening are described. No personalities
 are mentioned. References follow each article.

Khudyat, G. I. [Candidate of Technical Sciences], **D. A. Starikov**,
 and **J. A. Brul'ianskiy**, **Engineers**, Practice at the Nove-
 skiy Krasnogorsk Machine-building Company (Krasnogorsk New Machine-
 building Plant) in External Burnishing of Large Machine Parts
 with Rollers

The technique of conducting experiments, the geometry of the
 tool, the principles of selecting the burnishing regime, and
 the devices used are described and discussed. A table with
 diagrams of burnished machine parts and data on effects of
 burnishing is presented.

Kudryavtsev, I. V. and **M. A. Balabanov**, **Candidate of Technical
 Sciences**, **Work Hardening of Stepped Shafts by Pillet Peening**

Results of fatigue tests on stepped steel shafts are analyzed.
 Comparisons are drawn between shafts work-hardened by fillet
 peening and shafts not subjected to any work-hardening process.
 Fillet peening was accomplished on a rolling machine with a
 special attachment having a spring-actuated striking pin with
 a spherically rounded end.

Bulatov, I. I. [Engineer]. **Increasing the Life of Metallurgical**,
 machinery parts by External Burnishing With Rollers

Construction of the burnishing devices used are
 described, and some problems connected with the technique
 of burnishing are discussed. Results of testing burnished
 surfaces in operation are presented.

KOYRE, V.Ye., kand.tekhn.nauk; STEV'KO, D.A.

Using roll burnishing for improving the macrogeometry of
large part surfaces. Vest.mashinostr. 45 no.11:46-47 N
'65. (MIRA 18:12)

PAGE 1 BOOK EXPLOITATION

507/522

Academija nauk SSSR. Institut Fizicheskoy Khimii
Problemy Kinetiki i Kataliza. [t. 10]: Fizika i Tekhnika Kataliza
(Problems of Kinetics and Catalysis). [vol. 10]: Physics and Physical-
Chemistry of Catalysts. Moscow, Izd-vo Akademii Nauk SSSR, 1960. 465 p. Printed
and bound. 2,600 copies printed.

Editor: B.I. Brodskiy, Corresponding Member of the Academy of Sciences USSR,
and O.V. Krylov, Candidate of Chemistry; Ed. or Publishing House: A.Z.
Bandyukov; Tech. Ed.: G.A. Astaf'yeva.

PURPOSE: This collection of articles is addressed to physicists and chemists
and to the community of scientists in general interested in recent
research on the physics and physical chemistry of catalysis.

CONTENTS: The articles in this collection were read at the conference on the
Physics and Physical Chemistry of Catalysis organized by the Otdel Nauk i Tekhniki
nauchno-issledovatel'skogo Instituta Fizicheskoy Khimii, Academy of Sciences (USSR) and by
the Academic Council on the problem of "the scientific basis for the selection
of catalysts." The Conference was held at the Institute Fizicheskoy Khimii AS
SSSR (Institute of Physical Chemistry of the USSR) in Moscow, March 26, 1959.
Or the great volume of material presented at the conference, only papers and
published elsewhere were included in this collection.

Vol'nov, V.M., O.V. Krylov, and S.M. Kogarkov, [Institute of Physical
Chemistry of the USSR], "Catalytic Properties of Germanium,"

Kuchment, V.I., and G.M. Boreikov [Fiziko-Khimicheskiy Institut, Izdat. Nauk
tekhniki, Physico-Chemical Institute (ed. V.Ya. Karpov)], "Investigation of the
Relation Between the Catalytic Activity and the Semiconductor Properties
of Germanium,"

Izakhanov, V.I., O.P. Romanov, and V.I. Stenke [Institute of Physics of Germanium
of the AS USSR], "Change in the Surface Contact Potential of Germanium
During Adsorption and Catalysis,"

Krylov, O.V., S.I. Bogoliubov, and Ye. A. Tschir [Institute of Physical Chemistry of
the AS USSR], "Catalysis Over Semiconductors in the Semiconductor Zone
of Germanium,"

Kalchikov, I.V. [Eastern Siberian Branch of the AS USSR]. Selection of High
Efficiency Catalysts for Various Cases of Distillation
Separation,"

122

II. CATALYSIS OVER METALS

Korelev, G.M. [Physico-Chemical Institute (ed. I.Ya. Karpov)], "Catalysis
Over Metals,"

Bonch-Brykovich, V.I., and V.P. Olsko [Department of Physics of Metal State
University], "Contribution to the Theory of Chemical Adsorption of Metals,"

Fridrikhovskii, V.I. [Institute of Physical Chemistry of the Polish Academy of
Sciences, Uppsala], "Structure and Magnetic Properties of Some Metallic
Contacts,"

Frantsuzov, I.I. [Institute of Physical Chemistry of the AS USSR], "Investi-
gation of the Adsorption of Gases on Metals with the Aid of an Electron
Protonator,"

Gorobtsev, Yu. B. [Institut Fizicheskoy Khimii Izdat. Nauk i Tekhniki
AS SSSR], "Kinetics of Physical Chemistry Izdat. Nauk i Tekhniki
of the USSR], "On the Problem of the Relation of Catalysis and Chemistry to
the Electron State of Metal Surfaces,"

Kazal'shikov, A.I., and I.G. Antonova, "Investigation by Electromechanical
Methods of the Adsorption of Catalytic Hydrogenation,"

Schmidtov, D.V. [Academy of Sciences, Krasnoyarsk SSSR], "On the Problem of
Principles in the Selection of Catalysts for Liquid Phase Hydrogenation,"

Prokof'ev, I.M. [Institute of Organic Chemistry of the AS USSR], "Investigation
of the Selective Action of Catalysts in Hydrogenation and Reduction Reactions,"

Gorobtsev, A.I., and G.I. Boreikov [Moscow Chemical Technological Institute
Izdat. D.I. Mendeleev], "Catalysis of Isotopic Exchange in Molecular Hydro-
gen by Transition Metals of the 1B Period,"

Feofanov, B.A., L.D. Ivanovskiy, V.A. Kurnikov, V.M. Shabkov, I.M.
Dmitrijev, and S.D. Ivanovskiy [State Institute of the Nitrogen Industry],
"Synthesis and Structure of Iron Catalysts with Zinc and Four Producers for the
Synthesis of Ammonia,"

Sobolev, V.P. [Moscow State University]. "Relation Between the Parameters
of the Activation Equation for Coated Platinum Catalysts
and the Activation Equation for Coated Platinum Catalysts,"

Brodskiy, B.I., Yu. G. Sizov, and A.A. M. Tsvetkov [Institute of Physical
Chemistry of USSR], "Investigation of the Surface Method of the Bureau of
the All-Union Producer of an Ammonia Catalyst,"

210

TERENT'YEVA, M.V. [TSierents'eva, M.V.]; LOBACH, T.Ya.; STEN'KO, I.Ya.
[Stsian'ko, I.IA.]

Content of basic microelements in some varieties of fruit and
berry crops of White Russia. Vestsi. AN BSSR. Ser. biial. nav.
no.4:46-51 '64.
(MIRA 18:12)

STENKO, M. I. Cand. Med. Sci.

Dissertation: "Clinical and Laboratory Data for Evaluating the Effectiveness of Treating Infected Wounds with Gramicidin and Other Therapeutic Preparations." Central Inst. for Advanced Training of Physicians. 8 Jul 47.

SO: Vechernaya Moskva, Jul, 1947 (Project #17836)

KOST, Ye.A., prof.; STENKO, M.I.

"Blood picture and its clinical significance" by D. N. Ianovskii.
Reviewed by E. A. Kost, M.I. Stenko. Probl. gemat. i perel. krovi
4 no.6:59-61 Je '59. (MIRA 12:8)
(BLOOD) (IANOVSKII, D.N.)

STEN'KO, Mikhail Ivanovich; MAMYSH, A.I.; LISAKOVSKIY, I.N.

[The oldest in the South; outline history of the Taganrog
Ship Repair Plant] Stareishchi na IUge; ocherk istorii Tagan-
rogskogo sudoremontnogo zavoda. Rostov-na-Donu, Rostovskoe
knizhnoe izd-vo, 1961. 126 p. (MIRA 16:2)
(Taganrog—Ships—Maintenance and repair)

BORISOV, V.I.; STEN'KO, M.N.; SHIROKIKH, D.P.

Shortcomings of a zoology trial textbook ("Zoology"; textbook for secondary schools by V.F. Natali. Reviewed by V.I. Borisov, M.N. Sten'ko, D.P. Shirokikh). Biol. v shkole no.5:93 S-0 '58. (MIRA 11:11)

1. Krasnodarskiy pedagogicheskiy institut.
(Zoology--Study and teaching) (Natali, V.F.)

M.
STEN'KO, Yu., mladshiy nauchnyy sotrudnik

Data concerning temperature drops connected with air conditioning on
ships. Mor.flot 19 no.1:22-23 Ja '59. (MIRA 12:3)

1. Moskovskiy nauchno-issledovatel'skiy institut gigiyeny i sanitarii
im. F.F.Erismana.
(Ships--Air conditioning)

STEN'KO, Yu.M., mladshiy nauchnyy sotrudnik

Basis of hygienic factors of temperature and humidity of the air
in cabins of ships sailing in tropical waters. Gig. i san. 25
no. 5:38-43 My '60. (MIRA 13:10)

1. Is TSentral'noy nauchno-issledovatel'skoy laboratorii gigiyeny
vodnogo transporta.
(SHIPS—AIR CONDITIONING)

POPOV, Garri Sergeyevich; RASTORGUYEV, Petr Vasil'kevich; STEN'KO,
Yuriy Mikhaylovich; NOVIKOV, Teodor Nikitovich; BARKOV,
G.D., red.; BONDAREV, G.I., kand. med. nauk, red.;
MOSHAROVA, T.P., red.izd-va; TIKHONOVA, Ye.A., tekhn. red.

[Medical handbook for the ship's captain] Meditsinskii spravochnik kapitana. Pod obshchhei red. G.D. Barkova. Moskva,
Izd-vo "Morskoi transport," 1963. 213 p. (MIRA 16:5)

1. Direktor TSentral'noy nauchno-issledovatel'skoy laboratori
gigiyeny vodnogo transporta (for Barkov).
(MEDICINE, NAVAL—HANDBOOKS, MANUALS, ETC.)

KRASNOV, M.L., prof.; SIVOSHINSKIY, D.S., dotsent; ZIANGIROVA, G.G.;
VYALOVA, Ye.V.; STEN'KO, Z.L.

Results of three year's use of radioactive isotopes in the
diagnosis of intraocular tumors. Trudy TSIU 71:107-112 '64.
(MIRA 18:6)

1. Kafedra glaznykh bolezney (zav. prof. M.L. Krasnov), kafedra
meditsinskoy radiologii (zav. prof. V.K. Modestov) TSentral'nogo
instituta usovershenstvovaniya vrachey i Moskovskaya glaznaya
klinicheskaya bol'nitsa.

STENKOVSKAYA, M. L.

USSR/Cultivated Plants - Potatoes. Vegetables. Melons.

M-3

Abs Jour : Ref Zhur - Biol., No 20, 1958, 91662

Author : Stenkovskaya, M. L.

Inst : Omsk Agricultural Institute.

Title : Irrigation of Potato in Suburban Zone.

Orig Pub : S. kh. Sibiri. 1957, No 12, 40-43.

Abstract : In its 1954-1956 experiments the Agricultural Department of Omsk Agricultural Institute used Early Rose and Berlinerchen potato varieties. The dates of watering and the irrigation rates varied depending on the quantity and distribution of atmospheric precipitation during the vegetative period. For the Early Rose variety in the Fall, before planting, a thorough drenching was given at approximately 1000 m³ per hectare, which provided 300 m³ per hectare more water reserve before full sprouting than on

Card 1/2

- 47 -

STENKOVSKAYA, M. L., Cand Agric Sci (diss) -- "The significance of certain agronomic procedures in the irrigation of early and late potatoes in the suburban zone of the city of Omsk". Omsk, 1960. 21 pp (Abstracts of Dissertations Submitted at Omsk Agric Inst im S. M. Kirov), 120 copies (EL, No 12, 1960, 129)

STRELKOV, Yu. V.

"A Method of Ultrasonic Absorption Measurement in Solids."

paper presented at 4th All-Union Conf. on Acoustics, Moscow, 26 May - 2 Jun 58.

VRSEK, J., inz.; HENES, F., inz., CSc.; SZABO, A., inz.; STENO, J., inz.

Problems of continuous casting of low-carbon steels. Hut
listy 18 no.11:773-779 N°63.

1. Vyzkumný ústav hutnictví zeleza, Praha (for Vrsek and Henes)
2. Svermove závodiarske, Pobrezova (for Szabo and Steno).

STENO, M.

Osteopoikilosis. Bratisl. lek. listy 45 no.2:108-112
31 Ja '65

1. Ortopedicka klinika lek. fak. Univerzity Komenskeho v Bratislave (veduci - akademik J. Cervenansky).

HURVÍČEK, M.

Trauma to the spine in orthopedic work. Acta chir. orthop.
krem. Czech. 31 no.4; 313-318 Ag '64.

1. Ortopedicka klinika Lekarskej fakulty University Komenskoho
v Bratislave (prednosta prof. dr. J. Cervenansky).

STENOVIC, M.

"The market for raw materials."

p. 1098 (Tekstil) Vol. 6, no. 12, Dec. 1957
Zagreb, Yugoslavia

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

STEPAN, J, dr.

Medical profession and public authority. Cesk. zdrav. 12 no.5:
240-246 My'64

1. Vyzkumny ustav organizace zdravotnictvi v Praze.

STENPURINA, Z. K.

Cand Agr Sci - (diss) "Effect of sulfur of feed on the wool productivity of fine-fleeced sheep." Krasnodar, 1960. 23 pp; (Ministry of Agriculture RSFSR, Kuban' Agr Inst); 150 copies; price not given; (KL, 7-61 sup, 253)

IATAN, Nicolae, ing.; LANDES, V., ing.; ILINA, I., ing.; CIOCIRLIE, S., ing.;
MITROFAN, A.; POPA, M., ing.; MIHAILA, Gh.; POPA, Septimiu, ing.;
PASARE, P.; STENSCHI, C., ing.

Considerations on the quality of the equipment used for casting steel
ingots in Rumania. Metalurgia constr mas 14 no.11:976-983 N '62.

1. Institutul de cercetari metalurgice (for Iatan, Landes, Ilina).
2. Uzina "Victoria" Calan (for Ciocirlie, Mitrofan). 3. Intreprinderea
metalurgia Aiud (for Popa, M., Mihaila). 4. Combinatul siderurgic
Hunedoara (for Popa, Septimiu; Pasare). 5. Combinatul siderurgic
Resita (for Stenschi).

KELEMENY, B.; STENSZKY, Z.; GZOLINER, F.; MESZAROS, Z. SZIAVIK, L.

Pharmacological study of acetylated morphine derivatives. Kiserletes
orvostud. 10 no.1:25-35 Feb 58.

1. Debreceni Orvostudomanyi Egyetem Gyogyszertani Intezete es Ti-
zavasvari Alkaloida Gyar..

(MORPHINE, related cpds.
acetyl deriv., pharmacol. & tox. (Hun))

KELENTAY, B.; STENESZKY, E.; CZOLLNER, F.; SZIAVIK, L.; MESZAROS, Z.

Preparation and pharmacological properties of N-oxides of opium alkaloids.
Kiserletes orvostud. 10 no.1:70-77 Feb 58.

1. Debreceni Orvostudomanyi Egyetem Gyogyszertani Intezete im es Tis-
zavasvari Alkaloida Gyar.

(OPIUM
N-oxides of opium alkaloids, prep., chem. properties,
pharmacol. & tox. (Hun))

STENSZKY, Ernone, Dr.; ASZODI, Lili, Dr.; CSOBAN, Gyorgy, Dr.

Can antibiotics be bound to serum protein fractions? I. Orv. hetil. 100
no.2:70-71 11 Jan 59.

1. A Hajdu-Biharmegyei Tanacs Korhaza (igazgato-foorvos: Manyi Geza dr.)
Megyei Verkonzervalo Allomasanak, Debrecen (osztalyvezeto-foorvos: Aszodi
Lili dr.) es a Hajdusagi Gyorgyszergyar Biologial Kutato Laboratoriumnak
(osztalyvezeto: Csoban Gyorgy dr.) kozlemenye.

(SERUM ALBUMEN
binding of penicillin, exper. in vivo & in vitro (Hun))

(PENICILLIN
binding by serum albumin, exper. in vivo & in vitro (Hun))

ASZODI, Lili, Dr.; STENSZKY, Ernone, Dr.; BOT, Gyorgy, Dr.

Serum phosphohexose-isomerase studies in blood donors. Orv. hetil. 100
no.6:213-214 8 Feb 59.

1. A Hajdu-Biharmegyei Tanacs Korhaza (igazgato foorvos: Menyi Geza dr.)
Megyei Verkonzervalo Allomasanak (osztalyvezeto foorvos: Ászodi Lili dr.)
es a Debreceni Orvostudomanyi Egyetem Korelettani Intezene (igazgato:
Kesztyus: Lorand dr. egyet. tanar) kozlemenye.

(BLOOD TRANSFUSION

donors, blood phosphohexoisomerase determ. in screening for
prev. of post-transfusion hepatitis (Hun))

(HEPATITIS, etiol. & pathogen.

blood transfusion, prev. value of screening of donors by
determ. of blood phosphohexoisomerase activity (Hun))

(ISOMERASES, in blood

phosphohexoisomerase determ. in screening of blood donors
for prev. of post-transfusion hepatitis (Hun))

VAJDA, Istvan, dr.; ASZODI, Lili, dr.; HAJDU, Bela, dr.; STENSZKY, Ernone,
dr.; BARZO, Pal, dr.; HORVATH, Endre, dr.

Familial relations of acquired hemolytic anemia. Magy.belorv.arch.
13 no.4:121-124 Ag '60.

1. A Hajdu-Bihar Megyei Tanacs Korhaza (Igazgato: Dr. Manyi Geza)
I. sz. Belosztalyanak (Foorvos: Dr. Vajda Istvan), Megyei
Verkonzervalo Allomasanak (Foorvos: Dr. Aszodi Lili) es az
Orszagos Vertranszfuzios Szolgalat Kozponti Kutato Intezetenek
(Igazgato: Dr. Hollan Zsuzsanna) kozlemenye.
(ANEMIA, HEMOLYTIC genetics)

HORVATH, Endre; ASZODI, Lili; STENSZKY, Ernone; PAVAY, Agnes

Determination of incomplete anti-A and anti-B antibodies in group O
pregnant subjects and in high-titer group O blood donors. Kiserletes
orvostud. 13 no.3:245-250 Je '61.

1. Orszagos Verellato Szolgalat Korponyi Kutato Intezete es Hajdu-Bihar
megyei Tanacs Korhaz Verellato Osztalya.

(BLOOD GROUPS) (PREGNANCE blood)

LAZAR, Jozsef, dr.; STENSZKY, Erno, dr.; HAJDU, Bela, dr.

Quantitative determination of gastric acidity without a tube. Orv.
hetil. 102 no.18:830-832 30 Ap '61.

1. Megyei Tanacs, Kerhaza, Debrecen.

(GASTRIC JUICE)

STENY, YA., KOLCHIN, A. M., PANCHENKOV, G. M. and MALAKHOV, V. F.

"Die massenspektrometrische Isotopenanalyse an Bor auf der Grundlage
der Thermionen-Emission."

Report presented at the 2nd Conf. On Stable Isotopes
East German Academy of Sciences, Inst. of Applied Physical Material
Leipzig, GDR 30 Oct - 4 Nov 1961

KARTASHOV, T.M., elektrik; STENYANSKIY, V.N., elektrik

New automatic control system for electrodes for carbide kilns.
Suggested by T.M.Kartashov, V.N.Stenianskii. Rats. i izobr. predl.
v stroi. no.15:64-66 '60. (MIRA 13:9)

1. Zaporozhskiy zavod metallokonstruktsiy Ukrzavstal'konstruktsii
Ministerstva stroitel'stva USSR, g. Zaporozh'ye, poselok 13.
(Electrodes)

STENYK, V.V.

S

USSR / Human and Animal Morphology (Normal and Pathological).
Cardiovascular System.

Abs Jour : Ref Zhur - Biol., No 21, 1958, No 97084

Author : Stenyk, V.V.

Inst : Lvov Oblast Scientific Society of Anatomists,
Histologists and Embryologists

Title : Arterial Blood Supply of the Cerebellum of the Dog by
Direct and Collateral Blood Circulation.

Orig Pub : Sb. nauchn. rabot. L'vovsk. obl. nauchn. o-vo anatomov,
gistol. i embriol., 1958, vyp. 1, 21-25

Abstract : It was shown on 6 dogs of both sexes that the cerebellum
is supplied by three pairs of cerebellar arteries (CA):
oral (superior), dorso-lateral (anterior-inferior) and
ventro-lateral (posterior-inferior), departing from the
basilar and vertebral arteries. All 3 pairs of CA
anastomose richly between themselves, forming, on the
surface of the cerebellum, a dense fine network. Changes of
CA after simultaneous bilateral exclusion of vertebral

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STENYK, V.V.

Angioarchitectonic of the cerebellum following experimental ligation of the common carotid arteries in rabbits [with summary in English]. Biul.eksp. biol. i med. 45 no.3:114-117 Mr'58 (MIRA 11:5)

1. Iz kafedry anatomii L'vovskogo meditsinskogo instituta. Predstavlena deystvitelnym chlenom AMN SSSR S.A. Sarkisovym.

(ARTERIES, CAROTID, physiology
eff. of ligation of common on cerebellar vasc. system
(Rus))

(CEREBELLUM, blood supply.
eff. of ligation of common carotid arteries in rabbits
(Rus))

STENYK, V.V. (Lvov, ul. Serafimovicha, 11, kv.2)

The Department of Normal Anatomy at the Lvov Medical Institute.
Arkh.anat.gist.i embr. 37 no.12:100-103 D '59. (MIRA 13:5)
(ANATOMY educ.)

STENYK, V.V. (L'vov, ul. Serafimovicha, 11, kv. 2)

Arterial blood supply of the dentate nucleus of the rabbit
cerebellum in direct and collateral circulation. Arkh.anat.
gist.i embr. 39 no.7:80-83 J1 '60. (MIR 14:5)

1. Kafedra anatomii (zav. - prof. A.P.Lyubomudrov) L'vovskogo
meditsinskogo instituta.
(CEREBELLUM—BLOOD SUPPLY)

STENYK, V.V. (Lvov, ul. Serafimovicha, 11, kv.2)

Angioarchitectonics of the optic thalamus of the rabbit in
direct and collateral blood circulation. Arkh. anat. gist.
i embr. 45 no.11:93-97 N '63. (MIRA 17:8)

1. Kafedra anatomii (zav. - prof. A.P. Iyubomudrov) Lvovskogo
meditsinskogo instituta.

STENYUKOVA, A.Ya. (Leningrad)

Preoperative oxygen therapy for patients with acquired heart defects.
Grud. khir. 6 no.4:117-118 Jl-Ag '64.

(MIRA 18:4)

STEPACHENOK-RUDNIK, G.I.; SHIPITSYNA, G.K.; RODIONOVA, I.V.

Comparative examination of the chemical structure of Myco-
bacteria tuberculosis with various virulence. Zhur. mikro-
biol., epid. i immun. 40 no.1:44-48 '63. (MIRA 16:10)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei
AMN SSSR.

KONOPA, Jerzy; LEDOCHOWSKI, Zygmunt; NAZAREWICZ, Teresa; FALKOWSKI, Leonard;
STENZEL, Jan; PIKIEL, Leonard

Studies on antineoplastic properties of *Poria obliqua*. I. General
data and in vitro studies. Nowotwory 11 no.3/4:393-400 '61.

1. Z Katedry Technologii Srodow Leczniczych Politechniki Gdanskiej
Kierownik: prof. dr Z. Ledochowski Z Zakladu Anatomii Patologicznej
Akademii Medycznej w Gdansku Kierownik: prof. dr med. W. Czarnocki
Z Pracowni Nr 8 Zakladu Syntez Organicznej PAU w Gdansku Kierownik:
prof. dr Z. Ledochowski.

(ANTINEOPLASTIC AGENTS pharmacol) (FUNGI)

NAZAREWICZ, Teresa; LEDOCHOWSKI, Zygmunt; KONOPA, Jerzy; STENZEL, Jan;
PIKIEL, Leonard; FALKOWSKI, Leonard; WISNIEWSKI, Henryk

Studies on antineoplastic properties of *Poria obliqua*. II. Studies on the effect of *Poria obliqua* on the growth of transplanted tumors in animals. Nowotwory 11 no.3/4:401-411 '61.

1. Z Zakladu Anatomii Patologicznej Akademii Medycznej w Gdansku
Kierownik: prof. dr med. W. Czarnocki z Katedry Technologii Srodowisk Leczniczych Politechniki Gdanskiej Kierownik: prof. dr Z. Ledochowski i z Pracowni Nr 8 Zakladu Syntezy Organicznej Polskiej Akademii Nauk Kierownik: prof. dr Z. Ledochowski.
(ANTINEOPLASTIC AGENTS pharmacol) (FUNGI)

621.316.5.066.6

4113. Contact bounce. J. STENZL, *Elektrotech.*
Obrázek, 42, No. 10, 347-50 Plzeň, Czechoslovakia.

The problem of contact bounce is treated as the direct central impact of two imperfectly elastic bodies. The solution of the differential equation of the problem so posed is straightforward. Imperfect elasticity of the real materials can be allowed for by means of a correction constant.

B. F. KRAUS

STENZL, J.

Czechoslovakia

Formaenderungen elektrischer Kontakte durch Abnuetzung

SO: DT Elektrotechnik, Feb 1956, Uncl.

STENZL, J.

STENZL. J. Nikola Tesla. p. 70.

Vol. 12, no. 2, Feb. 1957

ELEKTROTECHNIK

TECHNOLOGY

Czechoslovakia

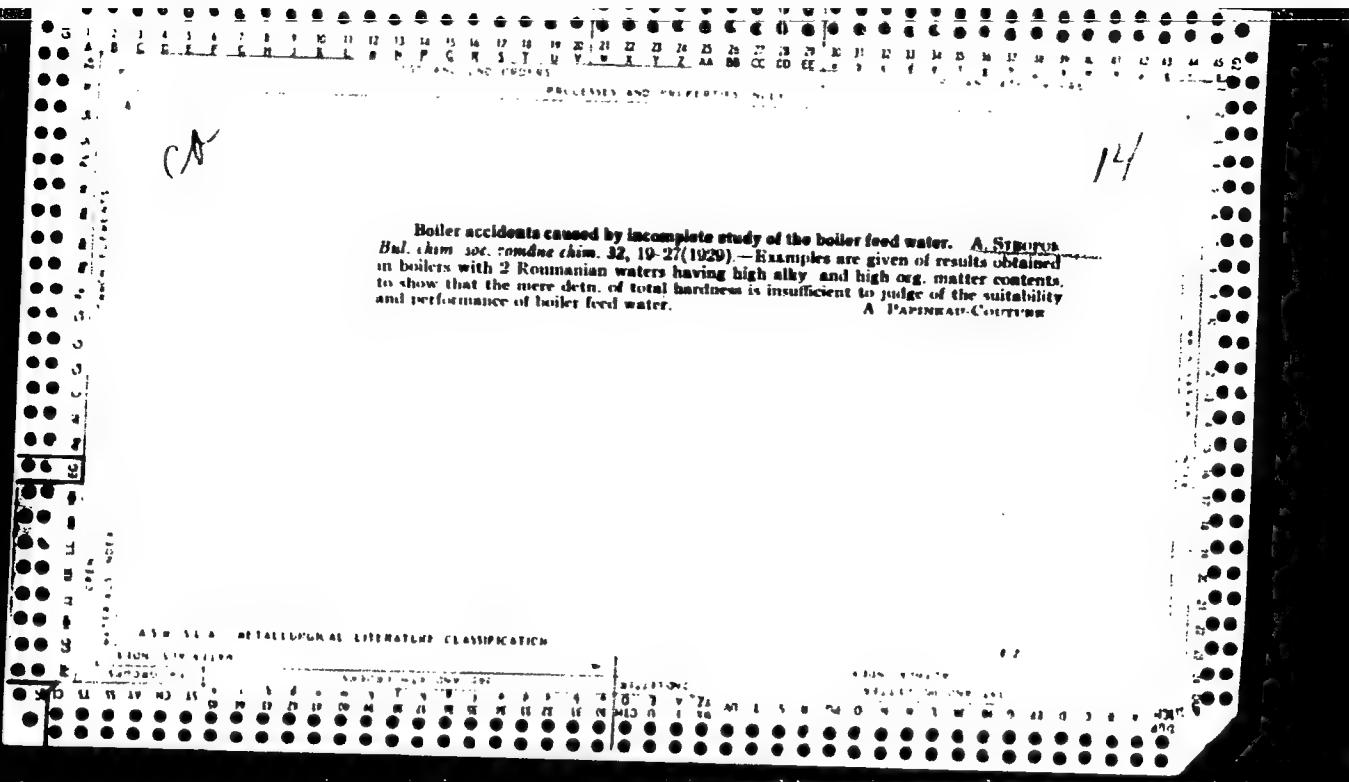
Sb: East European Accession, Vol. 6, No. 5, May 1957

MITITELU, C., ing.; HARABAGIU, M., chim.; STENZLER, R., ing.

Quality, control, statistics, suggestions for possible application in paper manufacture. Cel hirtie 11 no.8: 285-295 Ag'62.

estensione, il.

470 94114



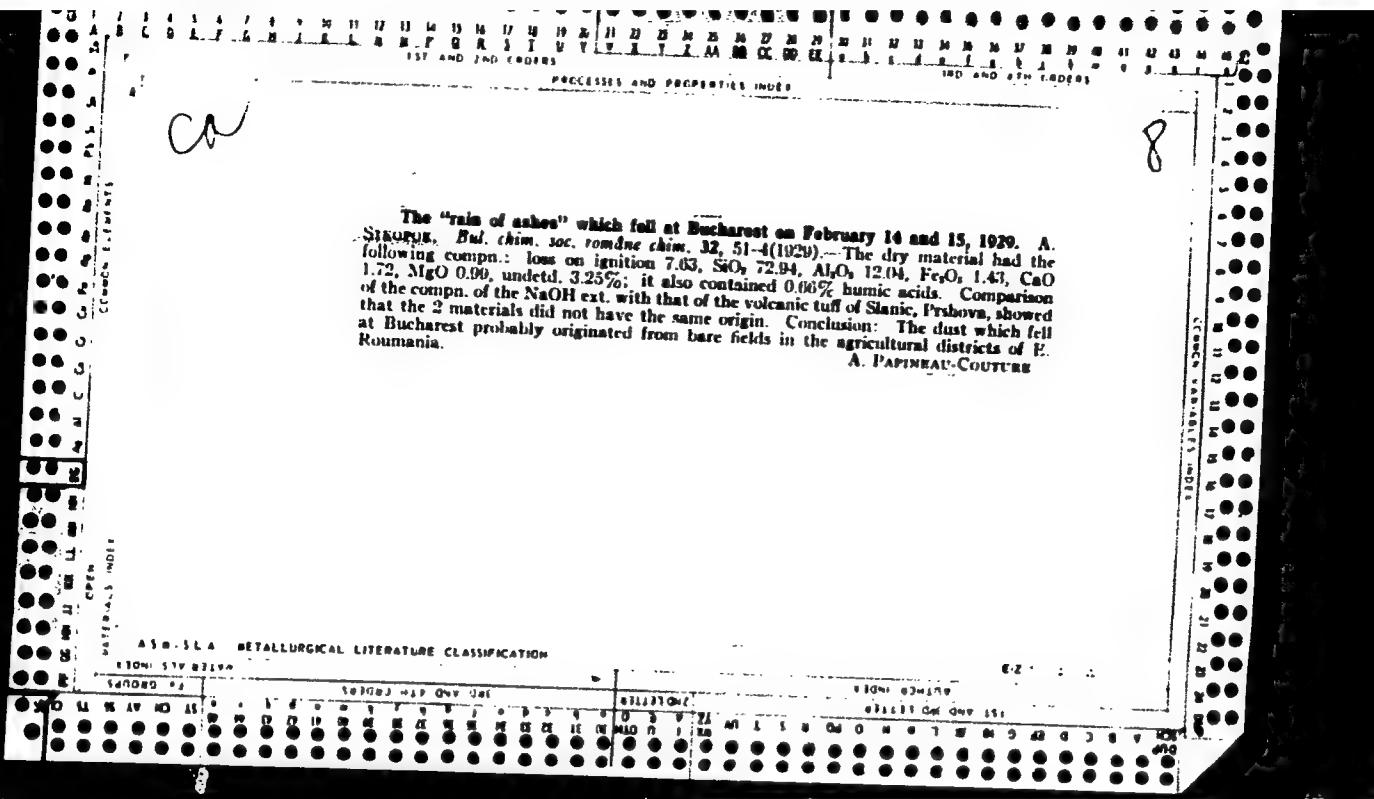
Determination of soluble silica in volcanic soils. *J. Black. Chem. Assoc. appl. Bihorost.*, 1922, **xxi**, 37-44; *Chem. Zentral.*, 1922, **i**, 710; cf. this vol., 202. Reaction with 10% Na_2CO_3 + 1% NaOH or 1% NaCl gives vein, which vary according to the nature of the material; and the duration of treatment. Al_2O_3 and Fe_2O_3 are also dissolved. *Anal.* L. S. T.

A-1

1000 ROMANTIC

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Influence of time of agitation and of addition of trass on the strength, setting time, and contraction of fluid cement mixes. A. SPRINGER (Bul. Chim. Soc. Roumaine Stiinț., 1959, 22, 55-56, 73-78, 99-104, 105-106). Comparative tests on 1:1 cement mixes with 20% H_2O with or without 25% addition of trass mixed for 5-110 min. show that the effect of time variation differs with different makes of cement and each case must be separately studied. The mixtures with trass vary less than pure mixture, but inversely. Addition of 20% of trass (in the wt. of cement) produced strength reductions of the order of 20%. mixes including lime and trass debris after 7 days setting were too weak for satisfactory use. After longer periods addition of trass improves the strength of common Portland cement somewhat, but not that of very finely-ground cement. Contraction is reduced by trass addition in the case of common cements, as also by prolonged contact with H_2O . With fine cements trass increases the contraction.

C. I.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001653120012-0"

Contributions to the critical study of the methods of the investigation of trans. I. The determination of the specific gravity of trans. A. STROK. *Bul. chim. soi comdne chim.* 32, 29-35 (1930). An investigation of the variations of the sp. gr. of trans which are obtained when benzine, illuminating oil or a mixt. of the 2 is used K. K.

430.314 METALLURGICAL LITERATURE CLASSIFICATION

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REF ID: A653120012-0
TEST AND AND GEMERS
PROCESSED AND PREPARED BY

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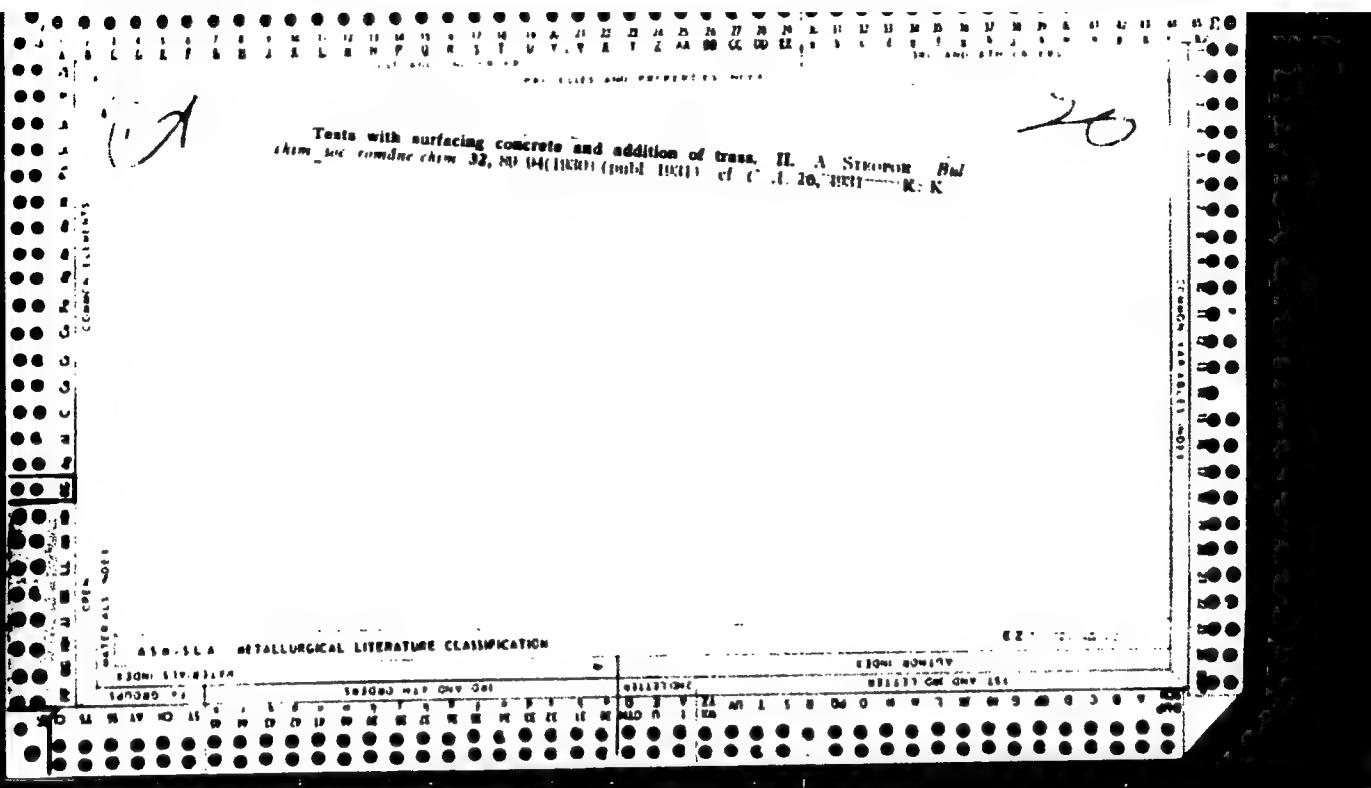
Critical studies on the determination of silica in volcanic tuff. A Survey. *Anal Chem* 32, 37-41 (1960). et al. J. 26, 1952. Full details are given of expts. which show that the attempt to det. sol. SiO₂ by extn with alk. solns is likely to result in erroneous conclusions

W. T. H.

ASTM-SEA METALLURGICAL LITERATURE CLASSIFICATION

The influence of time of mixing and of the addition of trass upon the strength of fluid cement mortars. A. STROPOR. *Bul. chim. soc. române chim.* 32, 55-84 (1930). The influence of time of mixing differs according to the nature of the cement and the kind of admix. that are made K. K. KAMMERER

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001653120012-0"



AN 20

Testing of high-grade concretes containing trass. I. A. Svirskii. *Bul. chow* 100, *romide chow* 33, 19-25 (1939). Addin of trass to cement (20% of the wt. of the cement) reduces the strength (detd. after 7 days) of a 1:2:4 concrete by about 25%. If sand is replaced by an amt. of trass equal to 25% by wt. of the cement, the reduction in strength is 27% for "Pod" brand cement and 17-4% for "Dambovitsa" brand of Kuhl cement. Conclusion. Concrete made with a binder of cement, trass and lime does not lend itself to works in which a high initial strength is required such as roads. A slightly higher strength is obtained with concrete in which the sand and gravel are replaced by volume full. A. PAPENKAP. *Chernuk*

Effect of the addition of trass on the contraction of cement. A. STROPOR. Bul.

chem. soc. române chim. **33**, 33-8 (1960) --Expts. were carried out on (1) standard portland, (2) high initial-strength portland and (3) Kuhl cements. In all cases the smallest contraction was observed with specimens which had remained longest under water. The effect of addn. of trass is greater with (1) than with (2) or (3). The increase in contraction of (2) is negligible with up to 10% trass, further addn. increases the contraction at an ever-increasing rate. Addn. of up to 20% trass to (1) causes appreciable reduction in contraction, the reduction being max. at 10-15% trass; above 20% an opposite effect is produced, as with (2).
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A.S.D.-SLA METALLURGICAL LITERATURE CLASSIFICATION

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34 The effect of magnesium sulfate on portland cement. A. SIRKUR. *Ned. chem. tot. romde chim.* 33, 51-6 (1933).—The destructive action on the mortar is due to the phys. transformation which follows the chem. reaction; the newly formed compds. have different cryst. forms with more water of cryst. This effect was noted by the change in vol. by the absorption of ions of the soln and by the yield of substances to the soln. G. T. Morris

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ASME METALLURGICAL LITERATURE CLASSIFICATION

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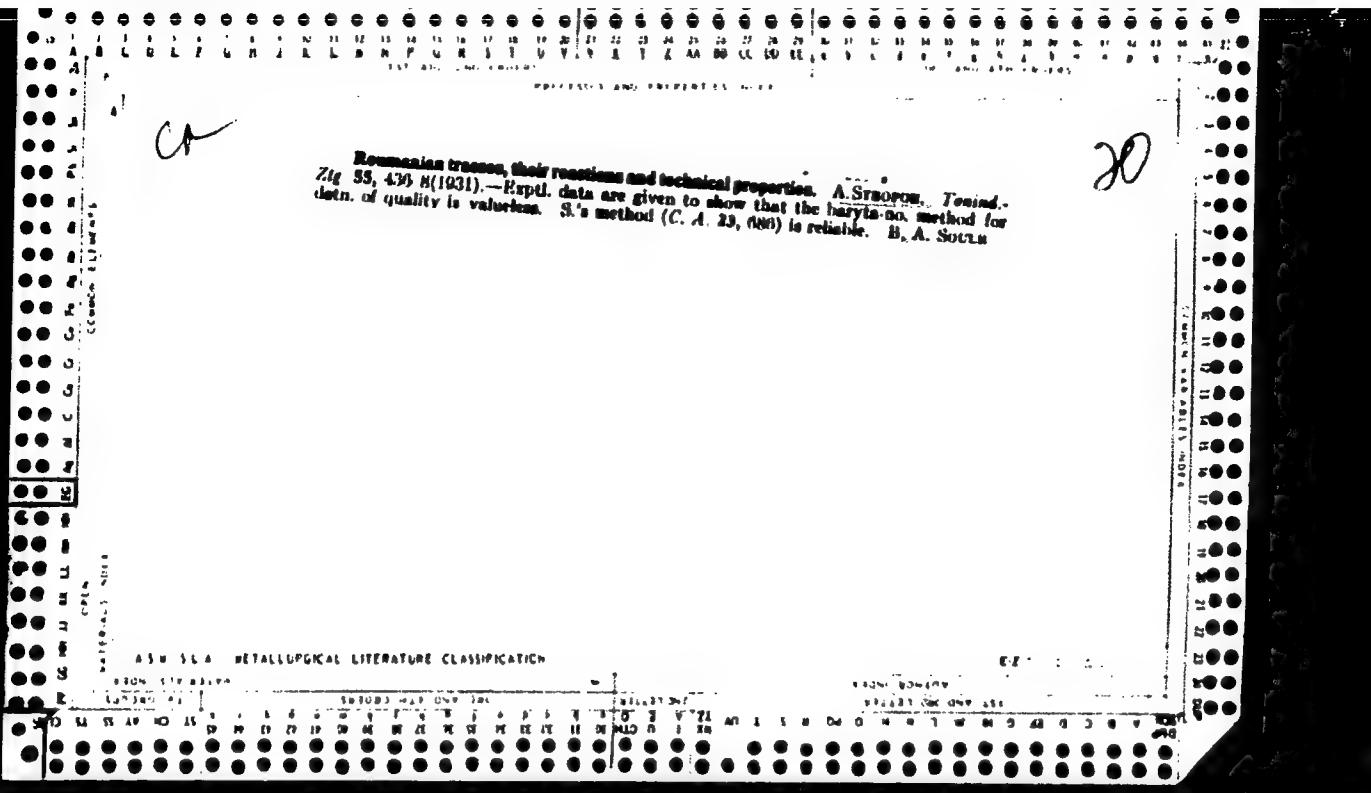
JA 20
The absorption power of trass of Sianic Prabova, Roumania, and its industrial application. A. Sirooz, *Bul. chim. soc. romane chim.* 33, 75-81 (1930). --The chem. reaction between trass and $\text{Ca}(\text{OH})_2$ soln. is preceded by an absorption phenomenon. Trass absorbs cations more readily than anions and Ca ions are fixed more than Mg ions. The properties of trass indicate that it can be used for *decalcification* of *boiler water* and also for *decolorization* of *mineral and vegetable oils*. G. T. MOTOK

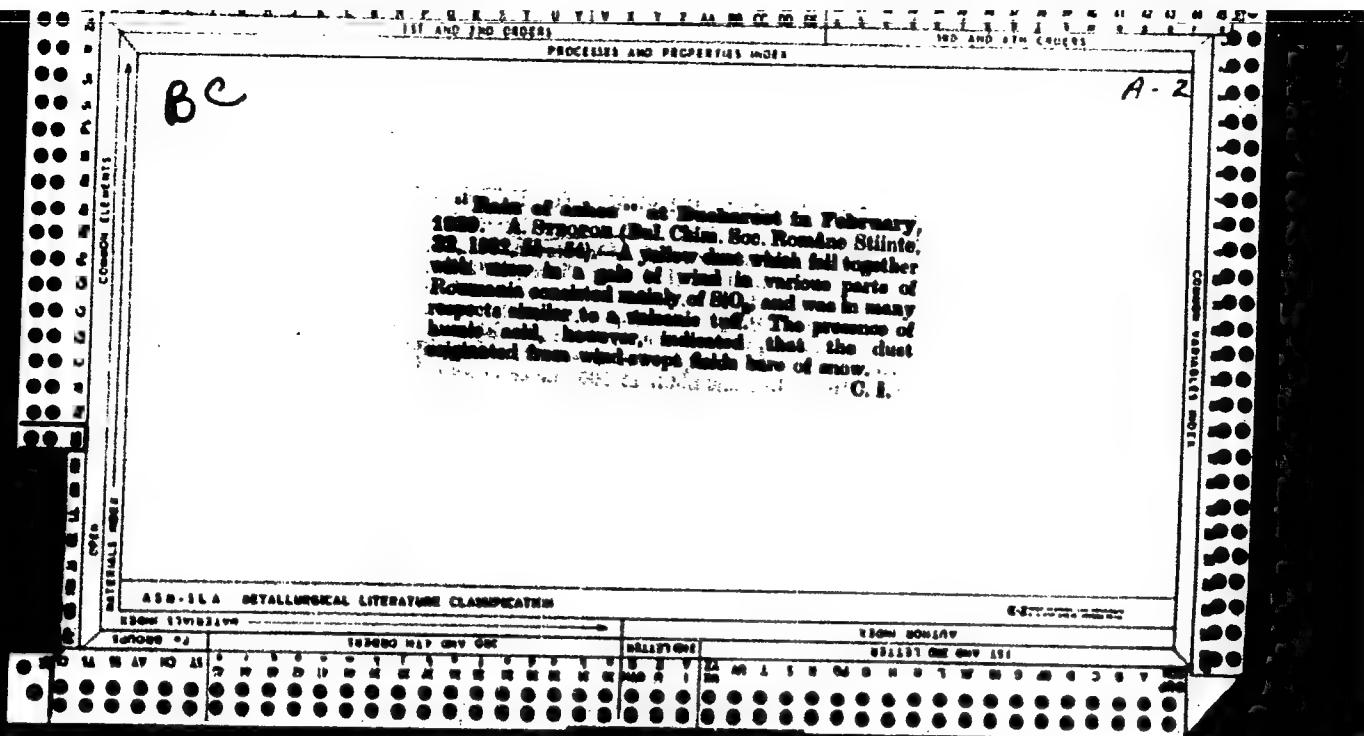
ASD-LSA METALLURGICAL LITERATURE CLASSIFICATION

CCW

Critical study of methods for determining silica in volcanic tufa. A. STREOROK. *Bull. chim. soc. romane chim.* 33, 11-17 (1951).—The cause of the hardening of hydraulic cement made from trass is chiefly the reaction between $\text{Ca}(\text{OH})_2$ from the added lime, and the SiO_2 of the trass. Various attempts have been made, therefore, to det. the so-called sol. SiO_2 by heating the sample with alk. solns. It is clearly shown, as a result of expts., that all such methods are more or less uncertain and that the results vary greatly when slight variations are made in the method of treatment, even when the variations are only those likely to occur in actual practice. W. T. H.

ASH-SEA METALLURGICAL LITERATURE CLASSIFICATION





BC

I. Reactivity of Rumanian trass in trass-cement mortars. II. Strength of trass-cement mortars. III. Effect of fineness of grinding on the strength of trass-cement mortars. IV. Effect of heating trass on its reactivity and technical properties. V. Effect of small quantities of sodium carbonate on the binding properties and strength of trass-cement mortars. A. Snyders (Bel. Chim. Soc. Roumanie, 1933, 34, 17-22, 23-34, 35-38, 40-49, 50-60).—I. The trass contains H_2O 13.8-14.4, SiO_2 42.5-44.4, $(Al,Fe)O_2$ 13.5-12.8, CaO 6.5-4.6, MgO 0.7-0.5, and minor constituents 2.8-3.5%. It takes an active part in the hardening of cement mixtures, since its SiO_2 and Al_2O_3 react readily with the free CaO and thereby the hydraulic modulus of the mortar fraction of the mixture is reduced, the aluminite modulus increased, and the % CaO sol. in 15% excess solution reduced the higher is the trass content.

II. Substitution of up to 30% of the usual cement content of cement-sand mortars by trass increases the strength, reduces the d_f , and yet results in a less porous product after hardening.

III. Addition of 10% of coarsely crushed or graded trass to cement increases the compressive strength of mortar made from it, whereas fine trass tends to reduce this strength owing to the rapidity with which it reacts with the CaO .

IV. Heating of the trass at 500° effects only a temporary improvement in its reactivity, whilst heating at 1000° causes a considerable diminution in its hydraulic properties.

V. Addition of small quantities of Na_2CO_3 to translucent mortars accelerates remarkably the rate of setting but this effect diminishes with increasing translucent content and increasing additions of Na_2CO_3 . A. B. P.

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B-I-10

Chemical and technical study of trass cement-standard mortars. A. FRANCO and H. TURNOVU (Bul. Chim. Soc. Române, 1953, 26, 3-14).—Silicic trass, either in the raw state or after treatment with acids or alkalis, used as a substitute (10% and 20%) in 3 cements of varying Ca content, gave sound mortars with greater H_2O requirements than that of the original cement. Setting times were altered. The chemical reactivity of the trass and the strength of the trass-cement mortars increased with age and with increasing Ca content of the cement. The higher Ca cements (without trass addition) decreased in strength at 1 year. Previous heat-treatment had no effect on the activity of the trass. A method is described for assessing chemical reactivity by determination of the hydroxamic modulus in the solution after treating the cements with HCl (d 1.12). T. W. P.

T. W. P.

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PROCESSES AND PROPERTIES INDEX

B-I-1

Reactions between traces and electrolytic concentrations and the application to water softening. A. STRMOR and G. TIANA (Bul. Chem. Soc. Române, 1933, 26, 45-57).—Investigation of the thermal dehydration and the action of cold HCl and of $NaCl$ and $Ca(OH)_2$ solutions shows that both Kinetic and Dej trances behave zoologically and are suitable as H_2O softeners. T. W. P.

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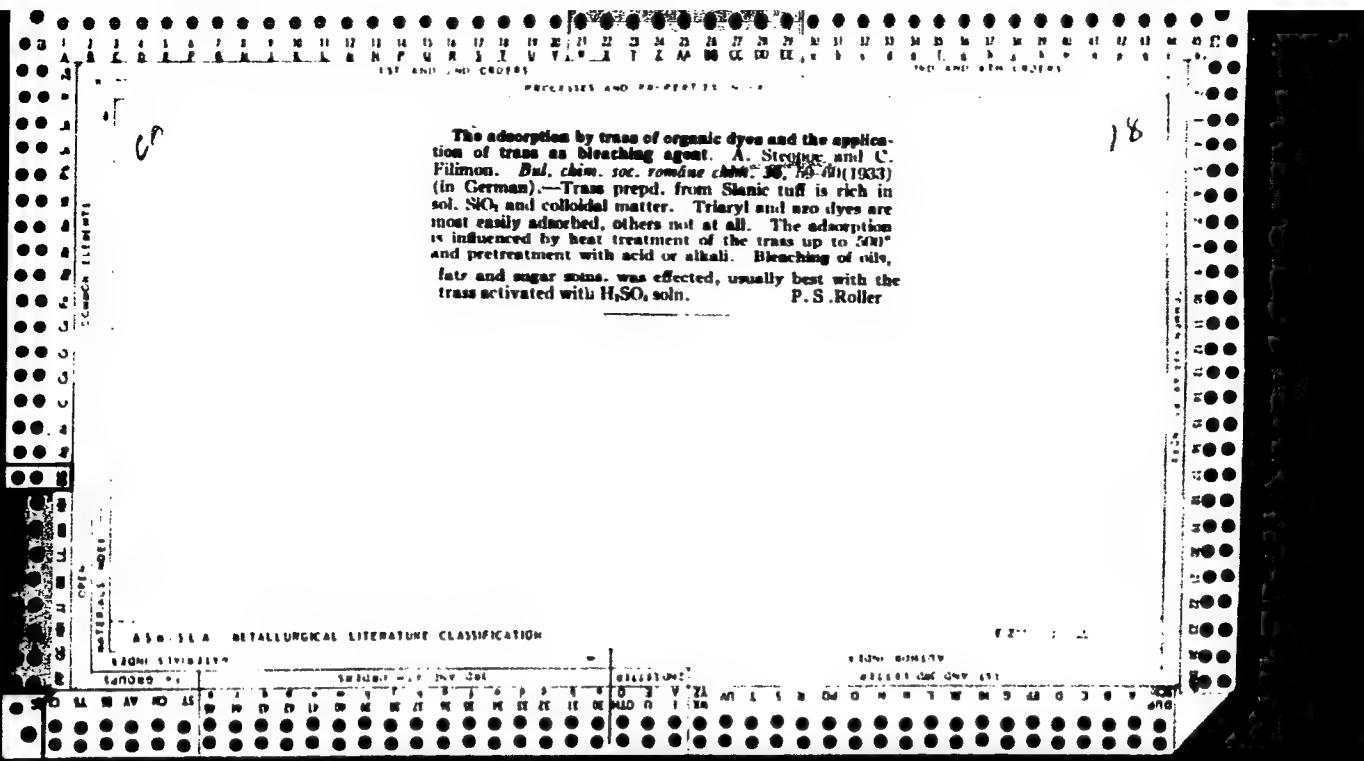
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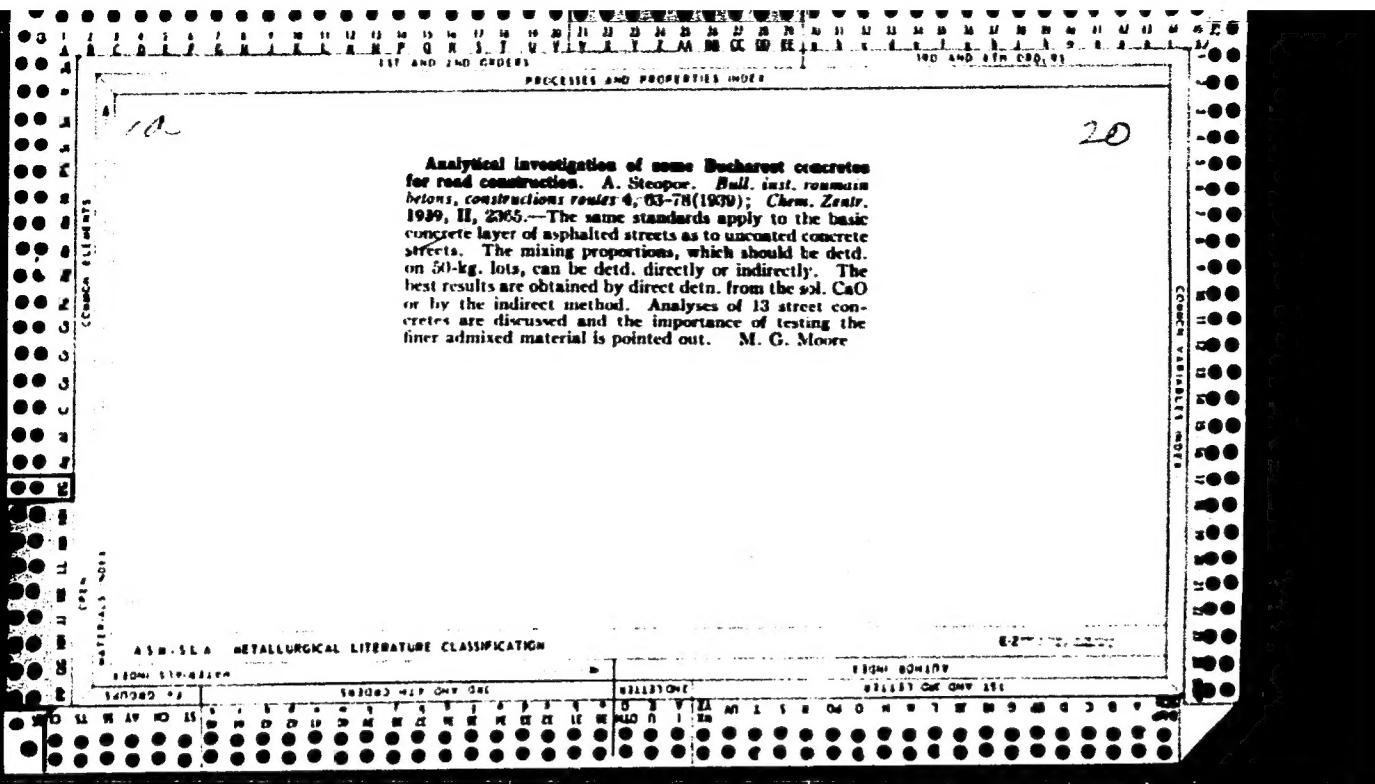


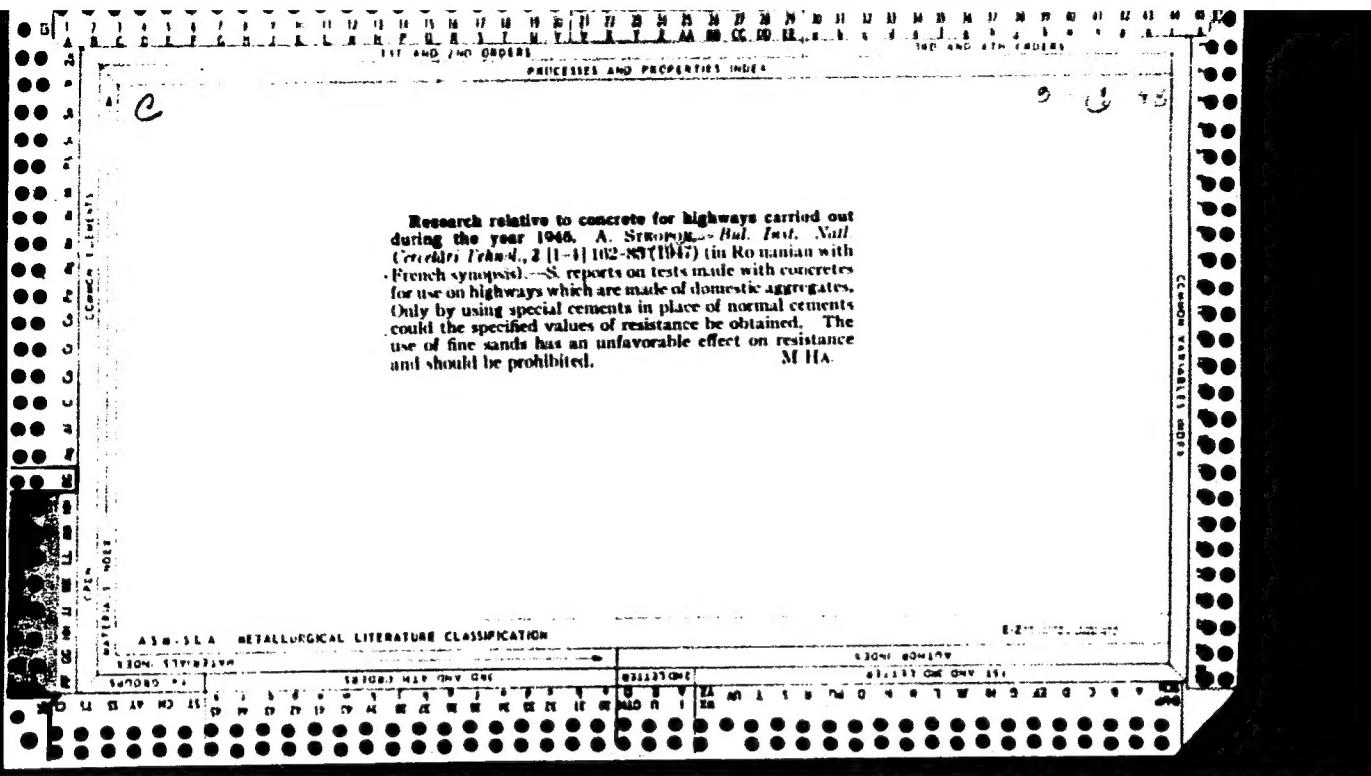
✓ The influence of trass upon the properties of plaster.
H. A. Steponas. *Bul. chim. soc. roumaine chim.* 30, 61-4
(1953) (in French).—Crude Slanic trass (I), heated on the
water bath with HCl soln. d. 1.13, washed and dried (II),
treated with NaOH soln. up to 1%, filtered and dried (III),
and heated on the water bath with 20% NaOH, washed
and dried (IV), were added to plaster. The time of flow
set was increased except for IV, and the scratch set de-
creased except for II. The strength was decreased by II,
increased by I, II and IV up to 10% added, and de-
creased thereafter especially for IV. The effect is at-
tributed to base exchange between alkalies in the trass and
 CaSO_4 in plaster. P. S. Roller

Determination of the mix proportions in mortar and concrete. A. Stepper. *Zement* 23, 759-62 (1934).—The methods proposed by Krieger (C. A. 18, 2231) and in later investigations are discussed. The detn. of the cement content of known mortars showed that treatment of the powd. material with dil. HCl only is not sufficient to dissolve all the silica from the cement, but that an alk. wash is required also. It is suggested that cold 5% HCl and cold 5% Na₂CO₃ contg. 5% NaCl solns. be used to avoid possible soln. of the natural silts and silicates. The addn. of 5% NaCl to the reagents and the use of 0.8% HCl wash soln. prevent the discoloration of the filtrates. It is possible to detect the presence of hydraulic admnts. by detg. the silica sol. in the HCl and in the Na₂CO₃ solns. separately, since the solv. of such admnts. is high in the alk. soln. H. F. Krieger

450-524 METALLURGICAL LITERATURE CLASSIFICATION

The contraction of certain mixed cements. A. Steeper, *Bul. Inst. r. m. Belge* 3, 102-74 (1915); *Chimie & Industrie* 41, 1120; cf. C. A. 32, 9420. There was added to 3 different cements 20-30% of powder, $\text{Ca}(\text{OH})_2$, pure and in admixt. with 40% of petroleum asphalt. All these auxiliary materials acted in the same way on the same cement, increasing the amt. of water required for mixing, the vol. of the suspension of binder and of the hardened paste, and also the contraction. The effects of the various auxiliary materials vary with the nature of the cement.





Setting of cements in the presence of great quantities of water. A. Stoian. *Bull. études et recherches lorr. (Bucharest)* 1, 183-8(1949).—An app. is described for measuring the setting time of cements which eliminates the discrepancies found between setting times measured in the lab. and observed in practice. A porous cup is filled to a height of 40 mm. with cement paste of normal consistency. The cup is immersed in a crystn. dish filled with H_2O or a salt soln. Salts which may form ppts. in the pores of the cup, such as sulfates, must be avoided. The penetration of a needle of 1 sq. mm. cross section under 300-g. load is measured in the usual way.

G. Cohn